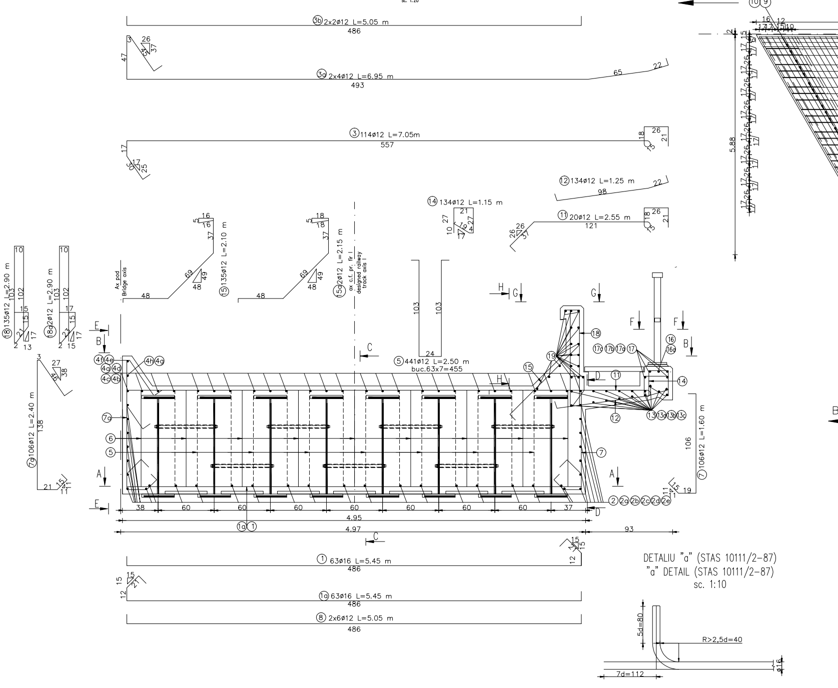
SECTIUNE TRANSVERSALA TABLIER POD
BRIDGE DECK CROSS SECTION

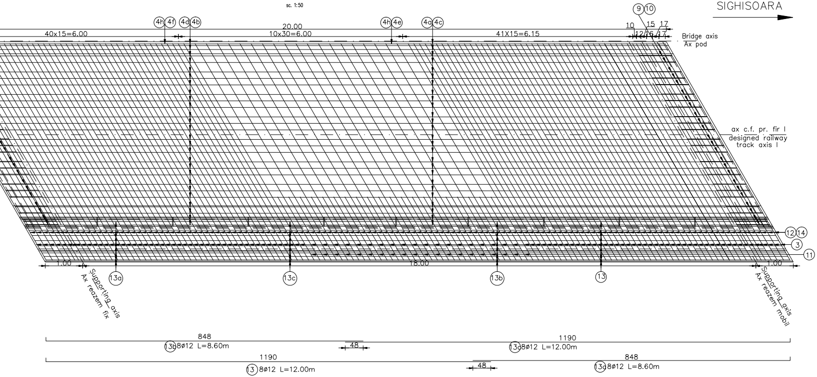
sc. 1:20


BRASOV
⑩⑨
16 12
17 17 15 10
2
5.88
15 17 26 17 17 26 17 17 26 17 17 26 17 17 26 17 17 26 17 17
ⓑ 2x2ø12 L=5.05 m
486
3 26 37 51 47
ⓐ 2x4ø12 L=6.95 m
493
65 22
③ 114ø12 L=7.05m
557
17 17 25 26 18 26 21 15
⑫ 134ø12 L=1.25 m
98 22
⑭ 134ø12 L=1.15 m
21 27 10 27 19 4 17
⑪ 20ø12 L=2.55 m
121
26 26 57 18 26 21 15
16 5 16 37
⑮ 135ø12 L=2.10 m
69 48 49
48
18 5 18 37
⑮ⓐ 2ø12 L=2.15 m
69 48 49
48
Ax pod
Bridge axis
ax c.f. pr. fir I
designed railway track axis I
103 103 24
⑤ 441ø12 L=2.50 m
buc.63x7=455
⑱ 135ø12 L=2.90 m
10 103 102 15 15 21 17 2 13
⑱ⓐ 2ø12 L=2.90 m
10 103 102 17 15 23 17 2 15
3 27 38 41
⑦ⓐ 106ø12 L=2.40 m
138
21 15 11 11
E B E A A B C C D D F F G G H H
④f ④e ④a ④d ④c ④b ④h ④g
⑦ⓐ ⑥ ⑤
⑱ ⑲ ⑮ ⑪ ⑫ ⑭ ⑯ ⑯ⓐ
⑰ⓒ ⑰ⓑ ⑰ⓐ ⑰
⑬ ⑬ⓐ ⑬ⓑ ⑬ⓒ
⑦
② ②ⓐ ②ⓑ ②ⓒ ②ⓓ ②ⓔ
⑦ 106ø12 L=1.60 m
106 19 15 11 1
38 60 60 60 60 60 60 60 37
4.95
⑴ⓐ ①
4.97
93
15 15 4 12
① 63ø16 L=5.45 m
486
15 15 21 12
①ⓐ 63ø16 L=5.45 m
486
⑧ 2x6ø12 L=5.05 m
486
5d=80
R>2,5d=40
ø16
7d=112

DETALIU "a" (STAS 10111/2-87)
"a" DETAIL (STAS 10111/2-87)
sc. 1:10

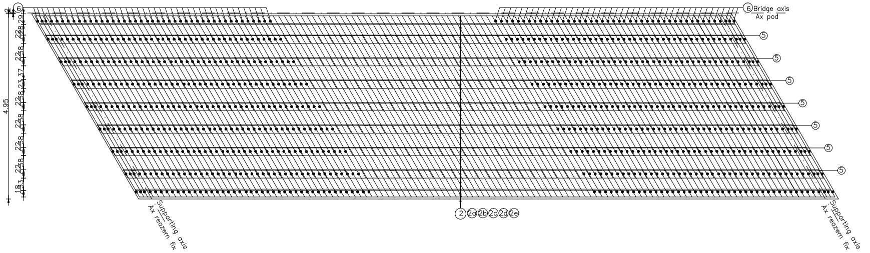
SECTIUNE B-B
B-B SECTION

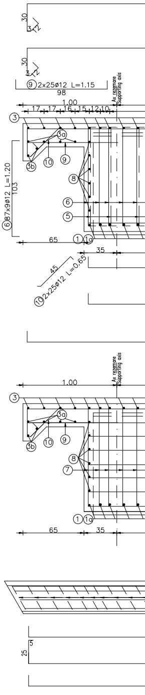
sc. 1:50


SIGHISOARA
9 10
4h 4f 4d 4b
4h 4e
4a 4c
40x15=6.00
20.00
10x30=6.00
41X15=6.15
10 15 17
12 16 17
Bridge axis
Ax pod
ax c.f. pr. fir I
designed railway track axis I
12 14
3
11
1.00
18.00
1.00
13a
13c
13b
13
Supporting axis
Ax reazem fix
Supporting axis
Ax reazem mobil
848
13b 8ø12 L=8.60m
48
1190
13c 8ø12 L=12.00m
1190
13 8ø12 L=12.00m
48
848
13a 8ø12 L=8.60m

SECTIUNE A-A
A-A SECTION

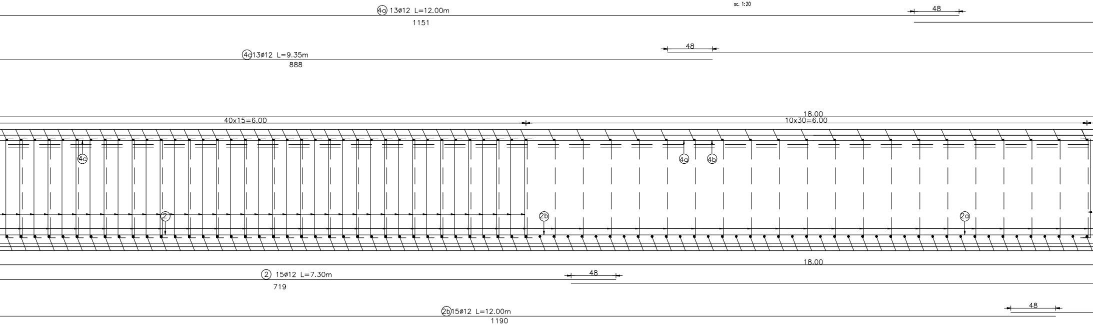
sc. 1:50


BRASOV
SIGHISOARA
35
18.00
35
6
6 Bridge axis
Ax pod
5
5
5
5
5
5
5
5
9
29
22
23
23
37
23
22
22
23
22
23
22
23
18
3
4.95
2 2a 2b 2c 2d 2e
Supporting axis
Ax reazem fix
Supporting axis
Ax reazem fix


30
3.12
30
3.12
9 2x25ø12 L=1.15
98
Ax rezemare
Supporting axis
1.00
17 17 16 15 12 10
3
3a
3b
10
9
8
6 87x9ø12 L=1.20
103
6
5
65
1 1a
35
45
10 2x25ø12 L=0.65
Ax rezemare
Supporting axis
1.00
3
3a
3b
10
9
8
7
1 1a
65
35
25
5

SECTIUNE C-C/C-C SECTION

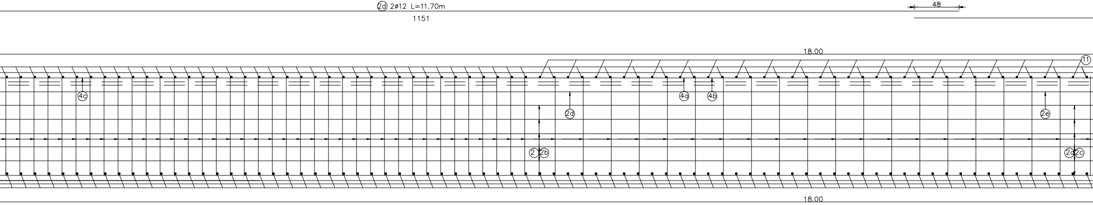
sc. 1:20



4a 13ø12 L=12.00m
1151
48
4c 13ø12 L=9.35m
888
48
40x15=6.00
18.00
10x30=6.00
4c
4a
4b
2
2b
2a
18.00
2 15ø12 L=7.30m
719
48
2b 15ø12 L=12.00m
1190
48

SECTIUNE D-D/D-D SECTION

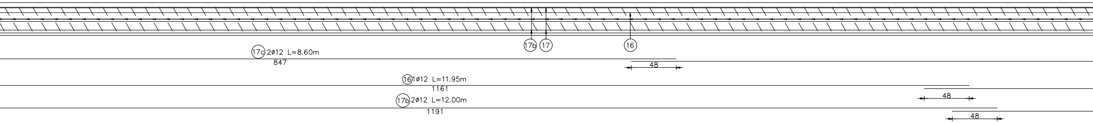
sc. 1:20



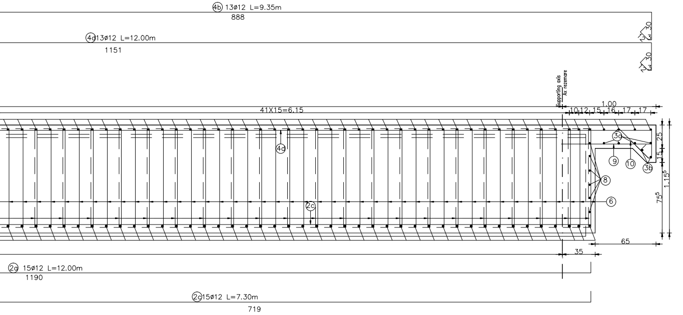
2d 2ø12 L=11.70m
1151
48
18.00
11
4c
4a
4b
2d
2e
2
2b
2d
2c
18.00

VEDERE F-F/VIEW F-F

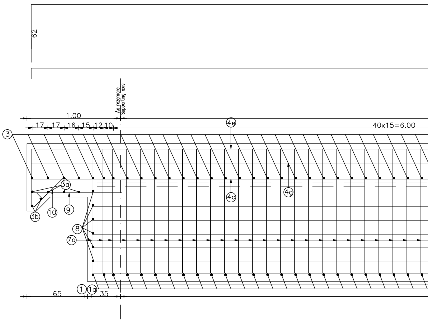
sc. 1:20



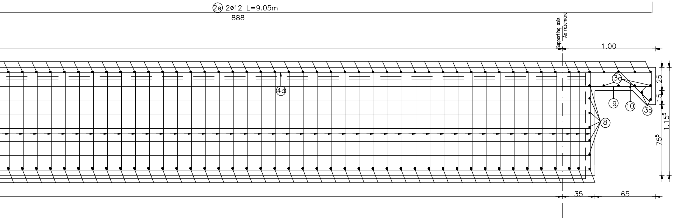
17b
17
16
17c 2ø12 L=8.60m
847
48
16 1ø12 L=11.95m
1161
48
17b 2ø12 L=12.00m
1191
48



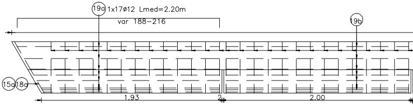
4b 13ø12 L=9.35m
888
30
4a 13ø12 L=12.00m
1151
30
Supporting axis
Ax rezemare
41X15=6.15
1.00
10 12 15 16 17 17
3a
3b
9
10
8
6
4a
2c
25
15
1.15⁵
75⁵
35
65
2a 15ø12 L=12.00m
1190
2c 15ø12 L=7.30m
719



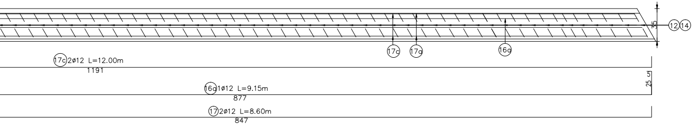
62
Ax rezemare
Supporting axis
1.00
17 17 16 15 12 10
4e
40x15=6.00
3
3a
3b
10
9
8
7a
4c
4a
1
1a
65
35



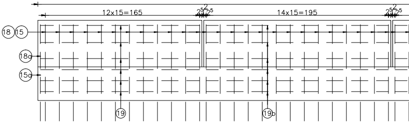
2e 2ø12 L=9.05m
888
Supporting axis
Ax rezemare
1.00
3a
4a
9
10
3b
8
25
15
1.15⁵
75⁵
35
65



19a 1x17ø12 Lmed=2.20m
var 188–216
19b
15a
18a
1.93
2
2.00



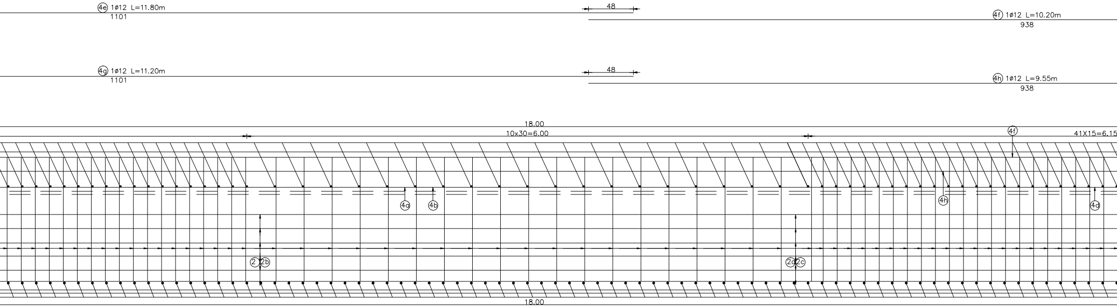
35
12
14
17c
17a
16a
17c 2ø12 L=12.00m
1191
16a 1ø12 L=9.15m
877
25
17 2ø12 L=8.60m
847



12x15=165
2⁵ 2 2⁵
14x15=195
2⁵ 2 2⁵
18
15
18a
15a
19
19b

SECTIUNE E-E/E-E SECTION

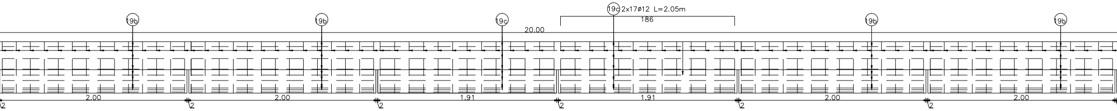
sc. 1:20



4e 1ø12 L=11.80m
1101
48
4f 1ø12 L=10.20m
938
4g 1ø12 L=11.20m
1101
48
4h 1ø12 L=9.55m
938
18.00
10x30=6.00
4f
41X15=6.15
4a
4b
4h
4d
2
2b
2d
2c
18.00

VEDERE G-G/VIEW G-G

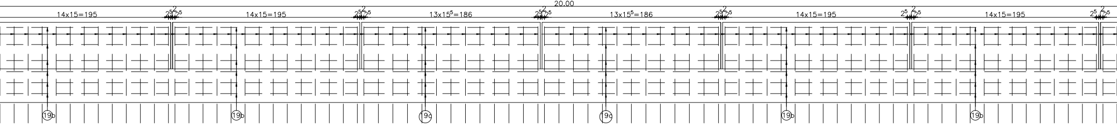
sc. 1:20



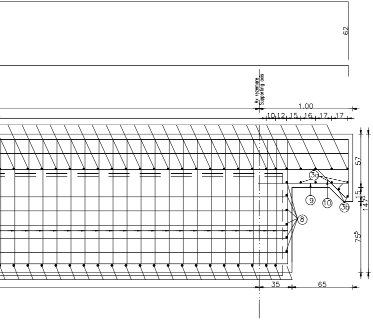
19b
19b
19c
19c 2x17ø12 L=2.05m
186
20.00
19b
19b
2.00
2.00
1.91
1.91
2.00
2.00
2
2
2
2
2
2

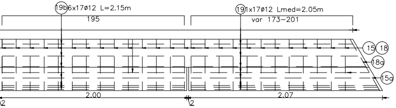
VEDERE H-H/VIEW H-H

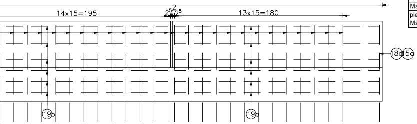
sc. 1:20



20.00
14x15=195
2⁵ 2 2⁵
14x15=195
2⁵ 2 2⁵
13x15⁵=186
2⁵ 2 2⁵
13x15⁵=186
2⁵ 2 2⁵
14x15=195
2⁵ 2 2⁵
14x15=195
2⁵ 2 2⁵
19b
19b
19c
19c
19b
19b


62
Ax rezemare
Supporting axis
1.00
10
12
15
16
17
17
57
15
14
75
35
65
3a
9
10
3b
8


19b 6x17ø12 L=2.15m
19 1x17ø12 Lmed=2.05m
195
var 173−201
15
18
18a
15a
2.00
2.07
2


14x15=195
25
2
15
13x15=180
18a
15a
19b
19c

EXTRAS DE ARMATURA TABLIER
TABLE FOR REINFORCEMENTS FOR SINGLE RAIWAY DECK

Marca	Diametru	Lung./buc.[m]	Nr.buc.	S355	S345
				ø12	ø16
1	16	5,45	63		343,35
1a	16	5,45	63		343,35
2	12	7,30	15	109,50	
2a	12	12,00	15	180,00	
2b	12	12,00	15	180,00	
2c	12	7,30	15	109,50	
2d	12	11,70	2	23,40	
2e	12	9,05	2	18,10	
3	12	7,05	114	803,70	
3a	12	6,95	8	55,60	
3b	12	5,05	4	20,20	
4a	12	12,00	13	156,00	
4b	12	9,35	13	121,55	
4c	12	9,35	13	121,55	
4d	12	12,00	13	156,00	
4e	12	11,80	1	11,80	
4f	12	10,20	1	10,20	
4g	12	11,20	1	11,20	
4h	12	9,55	1	9,55	
5	12	2,50	441	1102,50	
6	12	1,20	783	939,60	
7	12	1,60	106	169,60	
7a	12	2,40	106	254,40	
8	12	5,05	12	60,60	
9	12	1,15	50	57,50	
10	12	0,65	50	57,50	
11	12	1,25	134	32,50	
12	12	2,55	20	51,00	
13	12	12,00	8	96,00	
13a	12	8,60	8	68,80	
13b	12	8,60	8	68,80	
13c	12	12,00	8	96,00	
14	12	1,15	134	154,10	
15	12	2,10	135	283,50	
15a	12	2,15	2	4,30	
16	12	9,15	1	9,15	
16a	12	11,95	1	11,95	
17	12	8,60	2	17,20	
17a	12	12,00	2	24,00	
17b	12	12,00	2	24,00	
17c	12	8,60	2	17,20	
18	12	2,90	135	391,50	
18a	12	2,90	2	5,80	
19	12	2,05	17	34,85	
19a	12	2,20	17	37,40	
19b	12	2,15	102	219,30	
19c	12	2,05	34	69,70	
Lungimi totale pe diametre			(m)	6167,60	686,70
Masa pe metru liniar			(kg/ml)	0,888	1,578
Masa pe diametre			(kg)	5475,70	1083,90
Masa pe tip otel			(kg)	5480,00	1085,00
Masa totala tablier			(kg)	6565,00	
pierderi 5%			(kg)	328,25	
Masa totala tablier			(kg)	6900,00	

Beton: – C30/37 suprastructura/superstructure
Concrete:
Tipul grinzilor: – grinzi metalice sudate/steel welded girders
Beams type:
Otel pentru grinzi: – (OL 37−EP) S275J_3G_3 (EN 10025/2004)
Steel for the beams:
Armatura: – S355;S345
Reinforcement:
Strat de acoperire: – min. 4cm expunere in aer/air exposed
Concrete cover

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Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR
D					
C					
B					
A					

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EURO
EUROPEAN UNION FINANCED PR

CLIENT / CLIENT

C.N.C.F. "C.F.R." - S.A.

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT			Data Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza		–––––
Aprobat Approved	Coordonator Secțiune 1 Section 1 Coordinator	C. Gambelli		–––––
Verificat Checked	Expert Cheie Checking Expert	V. Kallidromitis		–––

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A.Stanciu - Dinulescu	01.2012	–––––
Întocmit Elaborated	Proiectant Designer	Olar Mihai	01.2012	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Braşov - Sighişoara

Proiect/Project
2004/RO/16/P/PA/00

Faza / Phase:
D.E. / E.D.

Denumire desen / Drawing Title :

POD Km. 257+483.30 L=18.00m/PLAN ARMARE SUPRASTRUCTURA/LINIA I

BRIDGE Km.257+483.30 D=18.00m/SUPERSTRUCTURE REINFORCEMENT PLAN/TRACK I

Codificare / Codification System	Scara / Scale 1:20,1:50	LOT / LOT	Nr. / No 01 / 01

E A 5 1 0 1 E 1 5 B C P V 0 3 6 3 0 1 1 0